



**Missouri Department of Natural Resources**  
**Little Muddy Creek - WBID 0856**  
**Water Chemistry Data, 2002-2005**

Org	Site	Site Name	Yr	Mo	Dy	Time	H	Flow	C	DO	pH	SC	NH3N	Color	SO4	Cl
MoDNR	856/0.8	L. Muddy Cr. Above Tyson Br.	2002	4	19	1105	9	0.3	25			443				
MoDNR	856/0.8	L. Muddy Cr. Above Tyson Br.	2002	6	20	1030	9	0.2	24	8.3	7.8	369	0.02499		25.2	10.4
MoDNR	856/0.8	L. Muddy Cr. Above Tyson Br.	2002	9	13	1050		0								
MoDNR	856/0.8	L. Muddy Cr. Above Tyson Br.	2002	11	18	1154		0.01	8.8		7.3	368	0.02499		8.14	11.1
MoDNR	856/0.8	L. Muddy Cr. Above Tyson Br.	2003	3	6	1150			4		6.5	360	0.02499		21.6	25.7
MoDNR	856/0.8	L. Muddy Cr. Above Tyson Br.	2003	8	7	1035		0	28	3	7.3	253	0.76	32	7.38	10.9
MoDNR	856/0.8	L. Muddy Cr. Above Tyson Br.	2003	5	29	1245		0.2	24.5		7.8	338	0.01499		25.8	14
MoDNR	856/0.8	L. Muddy Cr. Above Tyson Br.	2003	10	8	1150		0.02	17	8.3	8	267	0.01499	60	12.5	8.13
MoDNR	856/0.8	L. Muddy Cr. Above Tyson Br.	2003	12	5	1105		0.2	3		7.7	415	0.01499	28	32	14
MoDNR	856/0.8	L. Muddy Cr. Above Tyson Br.	2004	2	13	1655		0.4	1.5	15.7	5.8	619	0.06	16	60.7	32.6
MoDNR	856/0.8	L. Muddy Cr. Above Tyson Br.	2004	4	16	1140		1	18	14.1	8.1	464	0.01499	19	46.6	18.2
MoDNR	856/0.8	L. Muddy Cr. Above Tyson Br.	2004	6	30	1135		0.3	23.5	12.6	7.8	198	0.01499	26	33.6	16
MoDNR	856/0.8	L. Muddy Cr. Above Tyson Br.	2004	12	17	1150		1.1	3.1	11.5	7.3	511	0.01499	18	41.1	14.7
MoDNR	856/0.8	L. Muddy Cr. Above Tyson Br.	2005	1	28	1010		1.7	2.1	12.2	8	531	0.01499	10	65.5	17.5
MoDNR	856/0.8	L. Muddy Cr. Above Tyson Br.	2005	4	5	1135		2	15.8	11.1	8	475	0.01499	23	49.4	19.4
MoDNR	856/0.8	L. Muddy Cr. Above Tyson Br.	2005	5	11	1135		0.3	22.7	7.4	7.6	551	0.01499	16	60.8	21.4

The water quality standard for the protection of aquatic life for dissolved oxygen is 5mg/L. For dissolved oxygen, the Listing Methodology Document allows a water to be judged as impaired if measurements on 10 percent of the days monitored fail to meet the water quality standard. One of 10 days exceeded the standard, or 10 percent. The binomial probability is .264. Since this probability is more than the minimum allowable type one error rate of 0.1, this water is judged to be **unimpaired** by low dissolved oxygen.

The water quality standard for the protection of aquatic life for pH is pH levels from 6.5 to 9.0. For pH, the Listing Methodology Document allows a water to be judged as impaired if more than 10 percent of the measurements fail to meet the water quality standard. One of 14 pH measurements exceeded the standard, or 7.1 percent. The binomial probability is .415. Since this probability is more than the minimum allowable type one error rate of 0.1, this water is judged to be **unimpaired** by pH.

A Total Maximum Daily Load for temperature for Little Muddy Creek was approved by EPA in 2001.